potential, **ρ** represents the resistivity of the metal, **j** represents the density of the excitation current of the conductor, and **V** represents the voltage across the inductor.

3. (Previously Amended) The method of claim 1, wherein the speed measurement is used to servocontrol the excitation of the inductors into a predetermined value.

4. (Previously Amended) A method for regulating the continuous casting speed of a molten metal in an ingot mould equipped with a sliding field electromagnetic brake including several inductors, the method comprising:

supplying each of the several inductors with electrical power from at least one constant power source individually, wherein one of current and voltage of the constant power source's output is held constant; and

controlling the other of the current and voltage of the constant power source with a measurement of the other of the current and voltage in each inductor.

5. (Currently Amended) A continuous casting installation of the type using a sliding field electromagnetic brake to control the flow of a liquid metal provided by two ports of a nozzle, comprising:

at least [[one]] <u>two</u> inductor included in the electromagnetic brake;

each inductor powered by an individual supply circuit; and the installation includes means for regulating at least one of supply voltage and current of each inductor independent of other inductors to maintain the liquid metal flow speeds balanced between the two ports.

6. (Previously Amended) The installation of claim 5, wherein each supply circuit of each inductor includes its own means for regulating the electromagnetic excitation power of this inductor.

7. (Previously Amended) The installation of claim 5, further comprising a central station for controlling the supply circuits of different inductors to regulate the liquid metal flow speed.

8. (Previously Amended) The method of claim 2, wherein the speed measured is used to servocontrol the excitation of the inductors into a predetermined value.